

# STATE OF NEW HAMPSHIRE

Inter-Department Communication

**DATE:** November 16, 2009

**FROM:** Paul Currier, P.E., Administrator  
Watershed Management Bureau

**AT (OFFICE):** Department of  
Environmental Services, Water Division

**SUBJECT:** Draft Final Proposal for changes to Surface Water Quality Regulations Env-Wq 1700  
and Explanation of Changes

**TO:** Water Quality Standards Advisory Committee

**CC:** Gregg Comstock  
Harry Stewart  
Phil Trowbridge  
Bob Estabrook

DES presented drafts of changes to the Surface Water Quality Regulations Env-Wq 1700 to the WQSAC on January 22, 2009 and September 23, 2009. WQSAC members provided comments on the latest draft at the September 23, 2009 meeting and in writing after the meeting. DES incorporated the comments received in the draft final version of the changes. The changes from the latest draft are shown using “track changes”. Unless there are additional comments, DES will move forward with rulemaking after the November 23, 2009 WQSAC meeting.

## ATTACHMENT 1

*Readopt with amendment Env-Wq 1703.08 through 1703.11, eff. 5-21-08 (doc. #9162), to read as follows:*

Env-Wq 1703.08 Benthic Deposits. ~~(a) Class A waters shall contain no benthic deposits, unless naturally occurring.~~ ~~(b) Class A~~ **and class B** waters shall contain no benthic deposits that have a detrimental impact on the benthic community, ~~unless naturally occurring.~~

Env-Wq 1703.09 Oil and Grease. ~~(a) Class A waters shall contain no oil or grease, unless naturally occurring.~~ ~~(b) Class A~~ **and class B** waters shall contain no oil or grease in such concentrations that would impair any existing or designated uses.

Env-Wq 1703.10 Color. ~~(a) Class A waters shall contain no color, unless naturally occurring.~~ ~~(b) Class A~~ **and class B** waters shall contain no color in such concentrations that would impair any existing or designated uses, unless naturally occurring.

Env-Wq 1703.11 Turbidity.

~~(a) Class A waters shall contain no turbidity, unless naturally occurring.~~

~~(ba)~~ Class **A and class B** waters shall not exceed naturally occurring conditions by more than 10 NTUs.

~~(eb)~~ Waters identified in RSA 485-A:8, III shall contain no turbidity of unreasonable kind or quality.

~~(dc)~~ For purposes of state enforcement actions, if a discharge causes or contributes to an increase in turbidity of 10 NTUs or more above the turbidity of the receiving water upstream of the discharge or otherwise outside of the visible discharge, a violation of the turbidity standard shall be deemed to have occurred.

*Readopt with amendment Env-Wq 1703.13 and Env-Wq 1703.14, eff. 5-21-08 (doc. #9162), to read as follows:*

Env-Wq 1703.13 Temperature.

(a) There shall be no ~~change~~ **increase** in temperature in class A waters, ~~unless naturally occurring that could interfere with the uses assigned to this class.~~

(b) Temperature in class B waters shall be in accordance with RSA 485-A:8, II, and VIII.

*Readopt with amendment Env-Wq 1703.14, eff. 5-21-08 (doc. #9162), to read as follows:*

Env-Wq 1703.14 Nutrients.

~~(a) Class A waters shall contain no phosphorus or nitrogen unless naturally occurring.~~

~~(ba)~~ Class **A and class B** waters shall contain no phosphorus or nitrogen in such concentrations that would impair any existing or designated uses, unless naturally occurring.

~~(eb)~~ Existing discharges containing ~~either~~ phosphorus or nitrogen, **or both**, which encourage cultural eutrophication shall be treated to remove phosphorus or nitrogen, **or both, as applicable**, to ensure attainment and maintenance of water quality standards.

~~(dc)~~ There shall be no new or increased discharge of **sewage or waste containing** phosphorus **or nitrogen, or both**, into lakes or ponds **or to tributaries of lakes or ponds**.

~~(e) There shall be no new or increased discharge(s) containing phosphorus or nitrogen to tributaries of lakes or ponds that would contribute to cultural eutrophication or growth of weeds or algae in such lakes and ponds.~~ [merged with previous paragraph]

*Readopt with amendment Env-Wq 1703.18, eff. 5-21-08 (doc. #9162), to read as follows:*

Env-Wq 1703.18 pH. ~~(a) The pH of Class A waters shall be as naturally occurs. (b) The pH of Class A and class B waters shall be 6.5 to 8.0, unless due to natural causes.~~

Readopt with amendment Env-Wq 1708.06, eff. 5-21-08 (doc. #9162), to read as follows:

Env-Wq 1708.06 Protection of Class A Waters.

(a) In accordance with RSA 485-A:8, I, discharges of sewage or waste to Class A waters shall be prohibited.

(b) Proposed new or increased activities **affecting class A waters** that the department determines do not involve the discharge of sewage or waste shall be reviewed in accordance with Env-Wq 1708.01 through Env-Wq 1708.12.

**(c) Proposed new or increased activities affecting class A waters that the department determines could result in degradation of water quality shall be considered significant for the purposes of antidegradation review.**

Readopt with amendment Env-Wq 1708.10, eff. 5-21-08 (doc. #9162), to read as follows:

Env-Wq 1708.10 Demonstration of Economic or Social Development.

(a) Unless the department determines from documentation provided by the applicant, or other available information, that a proposed new or increased discharge or other activity would result in an insignificant impact to the existing water quality of a high quality waterbody, the department shall ~~require that~~ **not approve the discharge or other activity unless** the applicant provides documentation, ~~in accordance with the procedures delineated in "Interim Economic Guidance for Water Quality Standards" EPA 823-B-95-002, dated March 1995, demonstrating that the:~~

~~(1) Lowering of the~~ water quality is necessary to accommodate the development;

~~(2) The p~~Proposed project or activity will provide an important economic or social development in the area where the waterbody is located; and

**(3) The social and economic benefits of the proposed project or activity outweigh the environmental harm that could be caused by the lower water quality.**

~~(b) Where the department finds, based on the information provided in Env-Wq 1708.10(a) that a proposed project would provide an important economic or social development, it shall require that an alternatives analysis be developed, in accordance with Env-Wq 1708.10(c), to determine if it is possible to realize those benefits either without lowering water quality or with a reduced degree of degradation.~~

~~(eb) To determine if the lowering of water quality is necessary to accommodate an important economic or social benefit, the department shall require the applicant to~~ **shall complete an alternatives analysis as described in (c), below, and evaluate the following alternatives and submit the analysis to the department together with** technically and scientifically valid **supporting** ~~information describing.~~

**(c) The alternatives analysis required by (b), above, shall describe the benefits to and impacts on water quality of each all reasonable alternatives, on water quality and the degree to which the economic or social benefits could be realized if the alternatives were implemented including but not limited to the following:**

- (1) Alternative methods of production or operation;
- (2) Improved process controls;
- (3) Water conservation practices;
- (4) Wastewater minimization technologies;
- (5) Non-discharging alternatives;

- (6) Improved wastewater treatment facility operation;
- (7) Alternative methods of treatment, including advanced treatment beyond applicable technology requirements of the Clean Water Act; ~~and~~
- (8) Alternative sites, and associated water quality impacts at those sites; *and*
- (9) *For activities that involve alteration of terrain, alternative site design, including but not limited to infiltration of stormwater and minimization or disconnection of impervious surfaces.*

*(d) For purposes of evaluating whether the project or activity will provide an important social and economic development, the area where the waterbody is located shall include the municipality or municipalities in which the waterbody is located and all municipalities that abut those municipalities.*

*(e) To determine if the project or activity will provide an important social and economic development, the applicant shall submit information on, and the department shall evaluate, the following factors:*

- (1) The effect on public and social services;*
- (2) The effect on public health and safety;*
- (3) The effect on quality of life;*
- (4) The effect on employment;*
- (5) The effect on tourism;*
- (6) Consistency with municipal and regional master plans and economic development strategies; and*
- (7) Other social or economic factors that are specific to the area.*

*(f) To determine the environmental impacts of lower water quality, the applicant shall submit information on, and the department shall evaluate, the following factors:*

- (1) The sensitivity of existing and designated uses to the proposed discharge;*
- (2) The nature of the pollutants and their estimated fate in the waterbody;*
- (3) The estimated degree of change in water quality due to the proposed activity;*
- (4) The presence of high value resources that would be affected;*
- (5) The flow characteristics of the discharge;*
- (6) The reliability of proposed treatment technology, if any, and the risk management plan for non-standard situations; and*
- (7) Other factors that are specific to the affected waterbody.*

~~(d-g)~~ The department shall make a preliminary determination, based on the information provided in Env-Wq 1708.10(a) and (e), to approve or deny the applicant's request *in accordance with this section*.

~~(e-h)~~ If the department's *preliminary determination is to* approve the applicant's request, the department shall provide the opportunity for public comment on its preliminary decision in accordance with Env-Wq 1708.11.

*(i) The department shall determine that lowering of water quality is necessary to accommodate a project or activity in order to provide an important economic or social development if and only if:*

- (1) *An alternatives analysis has been submitted in accordance with (b) and (c), above;*
- (2) *The department has reviewed and accepted the alternatives analysis;*
- (3) *The department has reviewed and accepted the information provided by the applicant pursuant to (e), above, relative to important social or economic development;*
- (4) *The department has reviewed and accepted the information provided by the applicant pursuant to (f), above, relative to the environmental impacts of lower water quality;*
- (5) *The department has received public comment in accordance with Env-Wq 1708.11; and*
- (6) *The department finds that:*
  - a. *No feasible alternative exists that would not result in degradation;*
  - b. *The proposed degradation is the minimum necessary to carry out the project or activity; and*
  - c. *The social and economic benefits of the proposed project or activity outweigh the environmental harm that could be caused by the lower water quality.*

Readopt with amendment Env-Wq 1708.12, eff. 5-21-08 (doc. #9162), to read as follows:

Env-Wq 1708.12 Transfer of Water to Public Water Supplies.

(a) ~~The transfer of waters from rivers, streams, lakes, or ponds to waters used as a public water supply~~ ***one water body to another shall not be subject to the following unless all of the following conditions are met:***

~~(a) Both the source water in the area of the withdrawal and the receiving water shall be acceptable for water supply uses after treatment;~~

~~(b) The chemical, and physical water quality parameters of the source water shall be at least equal to the water quality of the receiving water;~~

~~(c1) The biological characteristics of the source **transferred** water shall be compatible with those of the receiving water and shall not contain **exotic aquatic species or other** species of aquatic life that would adversely affect the species of aquatic life **could result in a violation of Env-Wq 1703.19, relative to the integrity of the biological and aquatic community,** in the receiving water; and~~

***(2) Existing and designated uses shall be maintained and supported in the source water and in the receiving water; and***

~~(d3) The **withdrawal from the source water and transfer and withdrawal to the receiving water** shall comply with the antidegradation provisions of this part **both be considered significant for the purposes of antidegradation review.**~~

***(4) A water conservation plan that meets the water conservation requirements set forth in Env-Wq 2101 has been approved by the Department and is being complied with.***

***(b) Transferred water may be treated to comply with the requirements of this section.***

***(c) If all of the conditions specified in (a), above, are met, the transfer of water shall not constitute:***

***(1) A discharge under RSA 485-A:8, I; or***

***(2) A discharge under RSA 485-A:13, I(a).***